

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



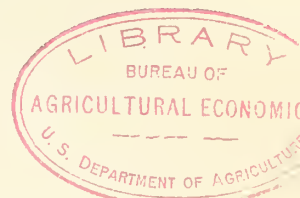
U. S. DEPARTMENT OF AGRICULTURE
Division of Publications
Press Service



no. 6

FUTURE LIVE-STOCK TRADE WITH BRAZIL

By L. B. Burk, Commissioner of Agriculture, Bureau of Markets
and Crop Estimates, United States Department of Agriculture;
E. Z. Russell, Commissioner of Agriculture, Bureau of Animal Industry,
United States Department of Agriculture.



The future of the live stock trade between the United States and Brazil will depend first on the ability of the United States to furnish suitable stock, second upon the development of the agricultural resources of Brazil, and third upon the return to normal financial conditions. In the early stages of trade between the two countries heavy risks will probably be assumed, but once proper connections are made and confidence is established among a large number of the cattlemen of Brazil, the new trade will probably attain large proportions.

It will probably be some time before large numbers of hogs are sent from this country to Brazil, though there is a fair demand for hogs of a fairly good quality, and this demand should increase from year to year. There is also a limited demand for light horses to be used for saddle purposes. As most of the breeds of poultry found in the United States are also to be found in Brazil the prices paid for imported stock are not high and breeders are safe in sending stock on order only.

Must Supply Good Animals

If a large cattle trade is developed it will depend upon the ability of the exporter to supply animals that will give good results. Although it is not necessary to send our highest class show animals to Brazil at this time a false impression of our live stock will be given if inferior animals are sent. In other words, good, strong, heavy-bodied animals, which are not too fine in quality, is the kind which should give best results, both for the buyer and seller. A few cattle, of course, could be sold at the leading shows at fair prices but one should not expect to get very large prices continually until it has been proved that animals from the United States will not die in large numbers when going through the tick fever.

Although Brazilian cattlemen usually expect to lose a certain percentage of the cattle they import, when an animal dies the buyer is naturally disappointed. If some system could be worked out whereby animals could be

immunized before they are shipped and could be sold guaranteed not to die from tick fever it is believed that a substantial trade would develop. Quite naturally in Brazil, as well as in this country, live stock of any kind sells to a better advantage when fat than when in only medium flesh, but it is impossible to have young cattle appear in good condition immediately following an attack of tick fever. It is certain that if the Brazilian continually has heavy losses he will not buy cattle from the United States, but if he could be assured of good results under his home conditions it is believed that he would be willing to pay very good prices for the kind that he can get in this country.

Uruguayan breeders are operating on this basis, and although they have not entered the central and western parts of Brazil to any large extent, they have sold large numbers of bulls to go into the southern part of the country, where they have been very successful. Some Uruguayans are now planning to sell live stock into the Matto Grosso country, and it is believed that they will be able to furnish cattle that will prove satisfactory.

Another condition which is having an important bearing on the trade at the present time is the rate of exchange and the ease with which they can supply their wants. It is much easier to get bulls from Uruguay and Argentina and the rate of exchange between these South American countries enables them to buy cattle very much cheaper. During the past few months the rate of exchange has been so much in favor of the United States that the prices have seemed unusually high to Brazilian breeders. The average Brazilian thinks in terms of contos, which are ordinarily \$250 in United States money, but the depreciation of their money has been so great that early in November, 1920, the conto represented only \$166, and in April, 1920, \$150. Although the prices of our purebred live stock have fallen at least 33 1/3 per cent below last year's prices the Brazilian breeder does not fully appreciate this lower price and is not in a position to take advantage of it.

Likes to Trade with American

While the conditions outlined above would seem to indicate that the Brazilian breeder would not buy many imported animals the fact remains that there are some people that are willing to pay high prices and take their own chances. The Brazilian likes to trade with Americans and will do so if he sees a fair chance of success. The average man is willing to pay reasonable prices but with only a limited number of purebred herds, all of

which are small, it is quite natural that he is not yet ready to pay the big prices that well established breeders in other countries are willing to pay. It is believed that small purebred herds can be established in Brazil, and as soon as this is done there should be a good demand for better sires to improve those herds. This, however, is a process that will require time to develop, but the firm or association which becomes well known while this development is taking place should have a good future business. It was reported that one Zebu bull imported from India had brought \$18,000; and a telegram was received by the owner of a yearling Holstein bull which contained an offer of \$4,000.

The secretary of the Rural Society in Sao Paulo made the statement that during the next ten or twelve years Brazil would require 10,000 bulls annually, and was very enthusiastic about trade with the United States. It is believed, therefore, that if good results can be obtained with live stock brought from the United States, that a very substantial trade will develop during the next ten years. From an economic viewpoint it seems logical to expect Brazil to get the bulk of their foundation stock from Uruguay and Argentina.

Brazil is a country about as large as the United States and has a wide variation in soil and climatic conditions. The part of Brazil covered by this report is the southern and eastern, or the states of Rio Grande do Sul, Parana, Santa Catharina, Sao Paulo, Minas Geraes, and Rio de Janeiro. These states, together with Goyaz and Matto Grosso constitute the principal live-stock sections of the country.

With the exception of a few sections in Rio de Janeiro, Sao Paulo, and Minas Geraes the country resembles the mountainous regions of southern Missouri. From an agricultural standpoint it is mostly undeveloped. One sees wide stretches of prairie land in Rio Grande do Sul and Sao Paulo similar to the rolling country of northern Missouri. It is understood that the same is true in Matto Grosso, but in the states of Parana, Santa Catharina, and parts of Minas Geraes and Rio Grande do Sul, the land ranges from rolling to very mountainous. In the mountainous regions, however, a very large per cent of the land is covered with either grass or timber. Most of this mountainous land would produce good crops but is too rough to be cultivated successfully. The states of Sao Paulo and Minas Geraes have very large coffee plantations and the cultivation of this crop, together with the fruit industry, is the principal occupation of the farmers in that section. The coffee area, however, is limited by freezing weather and by a scarcity of labor. Many of the larger

plantation owners are also raising some live stock and some of them are beginning to establish purebred herds of cattle and hogs.

In all of the cleared sections there is an abundance of natural grass, which furnishes good grazing for cattle. The soil in the central and southern part of Brazil is a deep red clay loam and appears to be very fertile. The climate and distribution and amount of rainfall is sufficient to produce an abundance of corn and other grains. In the southern part of the country the land is high and the winters are sometimes cold. The winters are usually dry but in Rio Grande do Sul snows are frequent.

Agriculture in its Early Stages

In this country, however, one does not see large fields of corn and wheat, but only small patches here and there where the woods have been cleared away and corn or rice planted among the stumps. In other words, agriculture is only in its early stages of development. This is only a stage of natural development where such an abundance of various kinds of feed grow without assistance. Live stock has in the past been grown easily, and with a sparsely populated country enough money could be made to satisfy the people without the great amount of hard work involved in growing grain. When the population increases conditions doubtless will change, making it impossible for the people to be satisfied with the income from live stock alone. Then they will change their methods and farm their land more intensively.

We were told, however, that great changes were taking place continually due to higher prices being paid for slaughter animals, hides, coffee, dairy products, etc., increase in immigration, and also to the automobile and moving picture films. With the automobile comes a greater desire for good roads and more knowledge, and since a great many of the Brazilian land owners are wealthy they are financially able to build good roads. One of the principal reasons for the lack of roads is that the owner lives in town and does not feel the need of them.

The principal feed crops produced are corn, mandioca, and sugar-cane. These crops are grown in a rather limited way, however, and in small fields and with practically no machinery. Mandioca is a root crop which supplies an abundance of fattening feed for hogs and yields heavily without cultivation. No large areas of wheat, corn, and oats grown as they are in the United States were seen. The principal method of producing corn in the states of Parana and

Sao Paulo is to cut the trees and brush, allow them to lie for three or four months, then set fire to them. After this is done the field is planted to corn, the only implement used being a sharp stick. The land is never plowed and there is no cultivation. After the crop matures hogs are frequently turned into the field to harvest the crop. A yield of 25 to 40 bushels of corn to the acre is not uncommon. Corn is raised on the same land not to exceed two years, because after this time the weeds have become so thick that a good yield is impossible. This field is then abandoned and the farmer clears another plot for his next year's crop. The used land is then allowed to lie idle and grows up into a thicket of brush and sprouts for several years, after which it is cut again and the cropping process repeated. This, of course, seems to be a very crude and wasteful method of utilizing land, but the land is so rolling that in most sections, if cultivated as in the United States, the land would wash very badly and would soon become a mass of ditches.

It was reported that more men each year are becoming interested in live stock and taking more pride in their herds.

Brazil has comparatively few breeders of purebred live stock. The cattle and hogs resemble the type and breeding of those of southern and eastern Texas. Many of the producers have been crossing and recrossing, apparently in an effort to find an animal suitable to local conditions which will, when slaughtered, yield a more satisfactory carcass. There is, however, in every section visited considerable well bred stock being used and, as a result of this, people are becoming more interested in the modern types and breeds.

Transportation

Transportation facilities, except in a part of the states of Sao Paulo and Rio de Janeiro, are generally poor. Most of the railroads are narrow gauge and there are so many curves that no great speed can be made. On most of the roads there are only two or three trains a week, which indicates that only a small amount of freight is transported over the lines. In the southern states, with the exception of Rio Grande do Sul, there is one principal railroad with very few branch lines and most of the live stock must be driven long distances to market.

In the states of Parana and Santa Catharina thousands of feet of sawed lumber were seen piled along the railroad waiting for shipment, and it was stated that the principal difficulty had been poor train service, excessive freight rates and export taxes. In fact some people claimed that Argentina

was getting lumber from the United States cheaper than she could get it from southern Brazil.

Within twelve hours of the city of Sao Paulo, which is one of the largest industrial cities in Brazil, we saw men driving hogs. They stated that they had driven them fifty miles. Of course cattle can be driven farther than hogs. The lack of transportation facilities has a tendency to retard the development of the country.

Until very recently wagon roads were very poor and they are still limited in number, but during the last year, marked improvement has been made in this respect. The lack of machinery has made it necessary for many of the roads that have been built to be made with hoes. The hoe has also been practically the only tool used in the cultivation of millions of acres of coffee trees.

Oxen are used almost exclusively in the fields as well as for hauling farm products to town.

Development of the Live-Stock Industry-Cattle Raising

The beef cattle business in Brazil is very important, and differs from cattle raising in either Uruguay or Argentina. Generally speaking, the quality of the cattle in Rio Grande do Sul is very good, resembling in that respect those in the northern part of Uruguay. The farther north one goes, however, the more inferior is the quality, except in the state of Sao Paulo.

There is considerable swamp land in the northern part, and in other regions the land is too rough to cultivate successfully. Nearly all of it, however, produces an abundance of good grass suitable for cattle, sheep, or goats.

The breeds which seem to give best results are Hereford, Shorthorn, Angus, Holstein, and the Zebu (East Indian cattle). The Herefords and Shorthorns come largely from Uruguay, Argentina, and England; the Holsteins from the United States and Holland; the Zebus from East India.

The type of the Caracu or native breed of cattle is very similar to that of our best beef cattle in the United States, but one sees very few purebreds of this breed in passing through the country. We were told that the Caracu would withstand ticks and drought as well as the Zebu.

The Zebu is an animal that is more hardy and appears to withstand the pests and droughts better than our native breeds, and is quite generally used throughout Brazil. It withstands tick fever, the berne fly, and feed shortages especially well, and sires a high percentage of calves. This, by many Brazilians, is considered much more important than to produce few^{er}/animals of better type and quality.



Conditions to be Considered

There are a number of conditions one should consider when undertaking to develop an export cattle trade with Brazil which have a tendency to discourage the use of imported beef type cattle in Brazil. A permanent trade can not be established unless the live stock purchased by Brazilian farmers will live and give good results. The cattle tick, hot weather, berne fly (warbles), and foot and mouth disease must all be reckoned with. The ticks, which produce a fever and which are constantly sucking blood from the animal, are perhaps the greatest drawback to the industry. The fact that all animals from tick-free territory must pass through this tick fever prevents many cattle producers from using bulls of our native breeds. Cattle must be under two years of age to live through this fever, and the younger the animal the smaller is the percentage of loss. On the other hand, the hot weather, change of feed and climate, berne fly, together with the tick fever and the small amount of attention live stock usually receives, are very severe on young animals. The Brazilian Department of Agriculture is continually working to find a method of successfully immunizing cattle against this fever, and they report that when the animal is not over two years of age they are usually successful. If they succeed in perfecting their methods so that the loss is practically eliminated then large numbers of Herefords, Angus, Shorthorns, and Holsteins will doubtless be imported into Brazil. There has been considerable discussion regarding the cleaning of territory in order that the country be free from ticks, but it is such an enormous undertaking to effectually rid a state of ticks and would cost such large sums of money that it is doubtful if it will soon be done.

The berne fly (warbles), especially in the central part of Brazil, is a very severe pest. Large masses of these wormlike insects collect under the skin on the shoulders and backs of the animals and in the spring of the year come out, causing the animal much annoyance. The hides, when the animals are slaughtered, are of very low grade.

The manner in which live stock is handled makes a rugged strong constitution essential. Quite often imported bulls are turned out with the herd and little care is given them. They must rustle for their feed and fight their own battles. The result is that the changed climate, different grasses, and the various diseases and pests to which they are subjected frequently keep imported bulls from giving the best results. It was observed, however, that when imported bulls were given a fair chance, kept away from the cows a part

of the time, and dipped at frequent intervals, they remained in good condition and sired just as many calves as the Zebu bull.

The Zebu (Brahma) is being imported in large numbers, and is used quite generally throughout Brazil. It is certain that the Brazilian cattle raiser will not discard the Zebu very soon unless there is a greater difference in price made between the steer sired by the Zebu bull and the one sired by the improved beef type bull. It is believed, however, that a greater difference will be made between the two types of cattle in the future than has been made in the past, because the Zebu has a tendency to produce an inferior beef animal, while the Hereford, Angus, and Shorthorn improves the type. The modern beef type from the United States also produces a much earlier maturing animal. These two facts, which the people are sure to realize sooner or later, are the basis for the opinion that in the future there will be a large demand for the improved types of beef-producing bulls. In other words, it is believed that the Zebu will be used to give hardiness to the foundation stock, but that imported bulls from the United States and other countries will be used to improve the type. This belief is strengthened by the fact that England will not use the beef of the Zebu, and other countries are sure to discriminate against it as soon as the effects of the great war cease to be so important a factor in the actual existence of millions of people in Europe.

Hog Raising

In all of the states visited hogs are produced. In some sections near the railroads where corn can be grown successfully large numbers of hogs are marketed each year. The quality and type varies considerably. However, most of them resemble the large type hog of this country. The leading breeds are Nationals and Large Blacks. All are rather coarse in quality with low backs and poor feet, and although they grow to be very large, are slow to mature. The common practice is to allow the hogs to graze and for the most part find their own living in the timber for the first year and a half or two years. After that they are turned into a field of corn or put into a fattening pen and fed for market.

In the dairy sections where large quantities of milk are produced a ration of skimmed milk and corn is the principal one, and in sections where milk is not to be had corn alone is used.

Duroc-Jerseys and Poland-Chinas imported from the United States are to be found on some of the farms. They give excellent results and are becoming



more and more popular each year. Berkshires, generally imported from England, are found in limited numbers. The Duroc Jerseys are mostly of good quality and type. The Poland-Chinas are mostly of the smaller medium type. In view of the fact that the Brazilian farmer likes large type hogs it is believed that the modern big type Poland-China would meet with favor in Brazil. There seems to be no question but that the type and early maturing qualities of the native hog of Brazil could be greatly improved by crossing with boars of some of our earlier maturing breeds.

The two diseases most likely to affect hogs are cholera and foot and mouth disease. We were told that in some sections cholera caused considerable loss, but it does not spread so rapidly as it does in the United States because of the mountainous character of the country. Foot and mouth disease is also isolated to a certain extent by the same condition. In some sections foot and mouth disease occurs every year, while in other sections it was learned that it had not appeared for as much as eight years. Ordinarily the loss due to foot and mouth disease among hogs is not very great. However, if the disease appears just before or after farrowing the litter very frequently is lost.

Dairying

The dairy business is largely confined to the states of Minas Geraes and Sao Paulo. In these two states large numbers of cows are milked and butter and cheese manufactured in large quantities. The modern dairy business, however, is practiced on a limited scale. Very seldom do the cows receive any feed except grass. Few up-to-date barns are used, and usually calves are allowed to suck the cows. It is a very common practice to milk only once each day, closing the calves up at night and milking in the morning, allowing the calf to remain with the cow the remainder of the day.

Foot and mouth disease perhaps effects the dairy business more seriously than it does the beef cattle business, because the fever causes the udder to become feverish and hard and the milk flow to stop for a limited period. If the cow has this disease during the early part of the lactation period, the reduction of the milk flow, which never returns to normal during that lactation period, represents a considerable loss. We were told by a number of dairymen that this disease would cause a reduction during the period of lactation of about one-third of the normal milk flow. It is not a common practice to keep any kind of milk or butter fat records.



The Brazilians

In any country much depends upon the people, their ideals, and education. Throughout Brazil there are two distinct classes, the well educated and wealthy classes and the laborers. The wealthy land owners are usually well informed and have found solutions to many difficult problems. In some places instead of our steel hinges and nails they have used wood. Homemade stone grinders propelled by water power grind the feed and hull the grain. Very comfortable homes built of wood and brick were seen, although in past years mud huts with thatched roofs had been extensively used. Many of the ranch homes visited, however, were equipped with all modern conveniences except heat. They had electric lights, tiled bathroom, running water, and their own sewage system. Practically all of the food used in the home is grown on the farm. In addition to the many different kinds of vegetables grown in this country tropical fruit grows abundantly; they make their own sugar from the sugar-cane; and by having their own coffee there is practically nothing that the farmer must buy. Nearly every farmer has his own brick plant and makes the brick and tile used in constructing the house and other buildings on the farm.

The laborer is usually a man who can neither read nor write and receives from \$15 to \$20 per month. In fact, in Brazil we were told that between 70 and 80 per cent of the people can neither read nor write. Usually good schools are provided in the towns and cities, but country school education, as it exists in the United States, is very limited. In fact many of the cities are modern in every respect, and their industrious people have caused them to advance very rapidly during the past few years. The fact that the labor is not educated makes it necessary to employ more men on the farm than are generally used in this country. The reason for this is that a man is given only one job and is not changed from that task during the day. The average laborer, however, is faithful, willing to learn, and does his work well.

